Event

MPTS IJET FAM 4301 – FAM 4304 T-45

Mission

FAMILIARIZATION

1.3 HOURS/X

ORM

FAM 4301-04

- **OPERATIONAL REQUIREMENTS / LIMITATIONS**
  - **CREW REST/ CREW DAY / WORK WEEK**
  - **WARM-UP ELIGIBILITY**
  - **PREVIOUS FLIGHT COMPLETE?**
  - **IP CURRENCY**
  - **READ AND INITIAL**

- **HUMAN FACTORS**
  - **LIFE STRESSORS / EXTERNAL FACTORS/ PERSONAL PROBLEMS**
  - **MEDICAL STATUS**
    - **CREW DAY**
    - **CREW REST**
    - **NOURISHMENT**
    - **HYDRATION**

- **HAZARDS AND CONTROLS**
  - **ROUTINE**
  - **WEATHER**
    - **CURRENT OBSERVATIONS AND FORECASTS**
    - **CROSSWINDS**
    - **FUEL CONSIDERATIONS**

TTO

FAM 4301-04

- **WHO WILL CALL A TTO?**

- **WHAT SITUATIONS WILL THE TTO BE CALLED?**
  - **SAFETY**
  - **CONFUSION**
  - **MISUNDERSTANDING**

- **IP RESPONSIBILITIES**
  - **RECOGNIZE THE NEED FOR A TTO**
  - **EXPLANATION / INSTRUCTION AS NECESSARY**
  - **DOCUMENTATION ON ATF**

- **WHEN AND HOW WILL TRAINING RESUME?**

SSR/DISCUSS ITEMS

FAM 4301-04

- **SPECIAL SYLLABUS REQUIRMENTS:**
  - **NONE**

- **PREREQUISITES:**
  - **FAM 4103**

- **DISCUSS ITEMS:**

  FAM 4301
  - **NATOPS/SOP/EP QOD, AND ELECTRICAL SYSTEM**

  FAM 4302
  - **NATOPS/SOP/EP QOD, AND HYDRAULIC SYSTEM**

  FAM 4303
  - **NATOPS/SOP/EP QOD, ENGINE ACCESSORY GEAR BOX, PA TO FULL-STOP (APPROACH VERSUS GROUND IDLE ON ROLLOUT)**

  FAM 4304
  - **NATOPS/SOP/EP QOD, AND FUEL SYSTEM**

SYLLABUS NOTES

FAM 4301-04

A. FLY EVENTS FROM THE FRONT COCKPIT

B. THE STUDENT SHALL FLY THE FOLLOWING MANEUVERS ON EVERY FLIGHT: BREAK TURN STALL, LANDING ATTITUDE STALL, AND APPROACH TURN STALL

C. THE STUDENT WILL PERFORM THE FOLLOWING MANEUVERS IAW FTI, NATOPS, AND SOP ON THE INDICATED EVENT:

- **FAM 4301: TWO OF THE THREE FOLLOWING MANEUVERS DESIRED (WX PERMITTING): STRAIGHT-IN PA, OVERHEAD PA, OR ABEAM PA.**
- **FAM 4302: SNA MUST HAVE FLOWN AT LEAST ONE STRAIGHT-IN PA, ONE OVERHEAD PA, AND ONE ABEAM PA PRIOR TO THE COMPLETION OF FAM 4302.**
- **FAM 4303: PRECAUTIONARY APPROACH TO A FULL-STOP (PRACTICE PA'S TO A FULL-STOP SHALL ONLY BE PERFORMED WHEN DUAL).**

SYLLABUS NOTES

FAM 4301-04

C. THE STUDENT WILL PERFORM THE FOLLOWING MANEUVERS IAW FTI, NATOPS, AND SOP ON THE INDICATED EVENT:

- **FAM 4304: RTB WITHOUT TCN OR WAYPOINT (WX PERMITTING), TWO OF THE THREE FOLLOWING MANEUVERS DESIRED (WX PERMITTING):**
  - **STRAIGHT-IN PRECAUTIONARY APPROACH**
  - **OVERHEAD PRECAUTIONARY APPROACH**
  - **ABEAM PRECAUTIONARY APPROACH**
  - **TWO PRECAUTIONARY APPROACHES MUST BE FLOWN TO A FULL-STOP PRIOR TO COMPLETION OF FAM 4304 (PRACTICE PA'S TO A FULL-STOP SHALL ONLY BE PERFORMED WHEN DUAL).**

D. STUDENT MUST HAVE A MINIMUM OF 60 FCLP-TYPE LANDINGS PRIOR TO FAM 4490. IF THIS REQUIREMENT IS NOT MET, WARMUP FAM 4386 SHALL BE AWARDED AS NECESSARY. **STUDENTS, KEEP TRACK OF YOUR LANDING COUNT. ADVISE YOUR IP OF YOUR TOTAL LANDINGS TO DATE**

E. STUDENT SHALL PERFORM A FULL-STOP LANDING WITH ROLL-OUT TO THE END OF THE RUNWAY ON TWO SEPARATE EVENTS WITHIN FAM41 THROUGH FAM43 BLOCKS PRIOR TO FAM4490.

ADMIN (CARD)

FAM 4301-04

- **A/C – ATC C/S – CREW**
- **BRIEF / WALK / TAKEOFF / LAND TIMES**
- **ATC CLEARANCE / DD-175**
- **FUEL PLAN/LADDER**
- **LINE / T/O / ABORT / RPM**
- **COMM PLAN**
- **NAV PLAN**

ADMIN

FAM 4301-04

- **LAUNCH**
  - **WEATHER / NOTAMS / TFR / BASH**
  - **PREFLIGHT / START / TAXI**
  - **ITO**
  - **SWAPPING OF CONTROLS**
  - **ENROUTE PROCEDURES**
  - **RADALT USAGE**

- **RTB**
  - **RECOVERY**
  - **DIVERTS**

CONDUCT

FAM 4301-04

- **TIMS RESUME REVIEW**
- **PRACTICE:**
  - **CHECKLISTS/COMM/GROUND OPS**
  - **TAKEOFF/DEPARTURE/FLIGHT ADMIN**
  - **DEPARTURE PROCEDURE**
  - **COURSE RULES**
  - **STALL SERIES**
  - **VERTICAL RECOVERY**
  - **MIN RADIUS TURN**
  - **AEROBATICS**
  - **SQUIRREL CAGE**
  - **UNUSUAL ATTITUDE RECOVERY**
  - **DESCENT/FIELD ENTRY**
  - **STRAIGHT-IN APPROACH**
  - **DOWNWIND ENTRY**
  - **PRECAUTIONARY APPROACH(ES)**
  - **VFR LANDING PATTERN**
  - **FIELD CARRIER LANDING**
  - **NF TOUCH-AND-GO**
  - **FF ROLL-AND-GO**
  - **CROSSWIND LANDINGS**
  - **WAVEOFF**
  - **FULL-STOP LANDING**

DID YOU KNOW?

• THE AIRSTART PROCEDURES UTILIZING THE MANUAL FUEL SYSTEM ARE SIMILAR TO THOSE EMPLOYED WHEN ON THE ENGINE MAIN FUEL SYSTEM. HOWEVER, DUE TO THE LOSS OF THE SIFCU, THROTTLE ASSISTANCE MAY BE REQUIRED ABOVE APPROX 40% RPM TO ATTAIN A STABILIZED IDLE SPEED.

•THE RELIGHT ENVELOPE FOR THE MANUAL FUEL SYSTEM IS WITH AN AIRSPEED OF 250 KIAS OR GREATER, AND ALTITUDE LESS THAN 25,000 FT.

CONDUCT

FAM 4301-04

- **RECOMMENDED FLOW**

FAM 4301:

A. AREA WORK

1) SNA PERFORMS THE FOLLOWING MANEUVERS:

- **VERTICAL RECOVERY**
- **MIN RADIUS TURN**
- **BREAK TURN STALL**
- **LANDING ATTITUDE STALL**
- **APPROACH TURN STALL**
- **AEROBATICS**
- **SQUIRREL CAGE**
- **UA RECOVERY**

B. PATTERN (USE NJW, IF POSSIBLE)

1) RECOVERY VIA PA (OVERHEAD OR STRAIGHT-IN)

2) SNA FLIES LANDING PATTERN, TO INCLUDE:

- **ABEAM PA**
- **NO FLAP TOUCH AND GO**

3) RTB NMM VIA OVERHEAD OR PA

4) SNA FLIES PATTERN UNTIL 400-500 LBS

C. GROUND OPS

1) SNA PERFORMS CLEAR ENGINE PROCEDURE

CONDUCT

FAM 4301-04

- **RECOMMENDED FLOW**

FAM 4302:

A. AREA WORK

1) SNA PERFORMS THE FOLLOWING MANEUVERS:

- **VERTICAL RECOVERY**
- **BREAK TURN STALL**
- **LANDING ATTITUDE STALL**
- **APPROACH TURN STALL**
- **AEROBATICS**
- **SQUIRREL CAGE (1)**
- **UA RECOVERY**

B. PATTERN (USE NJW, IF POSSIBLE)

1) RECOVERY VIA PA (OVERHEAD)

2) SNA FLIES LANDING PATTERN, TO INCLUDE:

- **FULL FLAP ROLL AND GO**
- **ABEAM PA (2 OR MORE)**

3) RTB TO NMM VIA STRAIGHT-IN PA

4) SNA FLIES PATTERN UNTIL 400-500 LBS

C. GROUND OPS

1) SNA PERFORMS CLEAR ENGINE PROCEDURE

CONDUCT

FAM 4301-04

- **RECOMMENDED FLOW**

FAM 4303:

A. AREA WORK

1) SNA PERFORMS THE FOLLOWING MANEUVERS:

- **VERTICAL RECOVERY**
- **MIN RADIUS TURN**
- **BREAK TURN STALL**
- **LANDING ATTITUDE STALL**
- **APPROACH TURN STALL**
- **AEROBATICS**
- **SQUIRREL CAGE**
- **UA RECOVERY**

B. PATTERN (USE NJW, IF POSSIBLE)

1) RECOVER VIA STRAIGHT-IN PA

2) SNA FLIES LANDING PATTERN, TO INCLUDE:

- **NO FLAP TOUCH AND GO**

3) SNA FLIES PATTERN UNTIL 1100 LBS AND THEN RTB TO NMM FOR OVERHEAD

4) SNA FLIES PATTERN AT NMM UNTIL 600-700 LBS

5) SNA PERFORMS ABEAM PA TO FULL STOP

C. GROUND OPS

1) SNA PERFORMS CLEAR ENGINE PROCEDURE

CONDUCT

FAM 4301-04

- **RECOMMENDED FLOW**

FAM 4304:

A. AREA WORK

1) SNA PERFORMS THE FOLLOWING MANEUVERS:

- **VERTICAL RECOVERY**
- **BREAK TURN STALL**
- **LANDING ATTITUDE STALL**
- **APPROACH TURN STALL**
- **AEROBATICS**
- **SQUIRREL CAGE**
- **UA RECOVERY**

B. PATTERN (USE NJW, IF POSSIBLE)

1) SNA RECOVERS TO NJW OR NMM WITHOUT TCN OR WAYPOINT (WEATHER PERMITTING)

2) SNA PERFORMS OVERHEAD PA

3) SNA FLIES LANDING PATTERN, INCLUDING:

- **FULL FLAP ROLL AND GO**

4) SNA FLIES PATTERN UNTIL 1100 LBS AND THEN RTB TO NMM VIA OVERHEAD

5) SNA FLIES PATTERN UNTIL 600-700 LBS

6) SNA PERFORMS ABEAM PA TO FULL STOP

C. GROUND OPS

1) SNA PERFORMS CLEAR ENGINE PROCEDURE

BLOCK MIF

FAM 4301-04

CTS REF	MANEUVER	FAM4304
1	General Knowledge/Procedures	4+
2	Emergency Procedures	3+
3	Headwork/Situational Awareness	3+
4	Basic Airwork	4+
5	Mission Planning/Briefing/ Debriefing	4+
6	Communications	4+
7	Ground Operations	4+
8	Flight Admin	4+
10	Takeoff	4+
11	Departure Procedure	4+
8	Course Rules	4+
29	Stall Series	4+
26	Vertical Recovery	4+
26	Min Radius Turn	3+
27	Aerobatics	3+
27	Squirrel Cage	3+

CTS REF	MANEUVER	FAM4304
28	Unusual Attitude Recovery	4+
13	Descent/Field Entry	4+
22	Straight-in Approach	1+
22	Downwind Entry	1+
21	Precautionary Approach(es)	3+
22	VFR Landing Pattern	3+
23	Field Carrier Landing	3+
23	NF Touch-and-go	3+
23	FF Roll-and-Go	3+
23	Crosswind Landings	3
24	Waveoff	3
23	Full-Stop Landing	4+

Emergencies

FAM 4301-04

- **AIRCRAFT FALLOUT**
- **CLEAR ENGINE PROCEDURE**
- **ABORTED TAKEOFF**
- **RWY DEP / LOSS OF DIRECTIONAL CONTROL**
- **SYSTEM FAILURES/ EPs / CRM**
- **BIRD STRIKE/ MIDAIR**
- **RADIO/ ICS FAILURE**
- **LOSS OF NAVAIDS / LOST PLANE**
- **INADVERTENT IMC / LOST SIGHT / LCLS**
- **DISORIENTATION / VERTIGO**
- **HYPOXIA**
- **EJECTION (HIGH / LOW / GROUND)**
- **SAR / ON SCENE COMMANDER**
- **DIVERT(S) / BINGO FUEL TO DIVERT**

STANDARD DEBRIEFING FORMAT

FAM 4301-04

- THE FLIGHT LEAD OR PILOT-IN-COMMAND IS RESPONSIBLE FOR ENSURING ALL FLIGHT OR CREWMEMBERS ARE THOUROUGHLY DEBRIEFED ON THE CONDUCT OF THE MISSION UTILIZING THE "S-P-B-E-MS-LL" FORMAT OUTLINED BELOW.

I. SAFETY
II. PLANNING
III. BRIEF
IV. EXECUTION
V. MISSION SUCCESS
VI. LESSONS LEARNED